

STANDARD STATE HAZARD MITIGATION PLAN REVIEW CROSSWALK**FEMA REGION IX**

State: Hawaii

Date of Plan: 2007 update

Standard State Hazard Mitigation Plan Review and Approval Status

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FEMA Reviewer: Diane Earl; Juliette Hayes; Robert McCord	Title: Plan Reviewer	Date: October 23, 2007
Date Received in FEMA Region IX	October 22, 2007	
Plan Not Approved		
Date Plan Approved	October 24, 2007	

STANDARD STATE HAZARD MITIGATION PLAN SUMMARY CROSSWALK

The plan cannot be approved if the plan has not been formally adopted.

Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score.

SCORING SYSTEM

Please check one of the following for each requirement.

N – Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.

S – Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Prerequisite

Adoption by the State: §201.4(c)(6) and §201.4(c)(7)

NOT MET	MET
	X

Planning Process

Documentation of the Planning Process: §201.4(c)(1)

Coordination Among Agencies: §201.4(b)

Program Integration: §201.4(b)

N	S
	X
	X
	X

Risk Assessment

Identifying Hazards: §201.4(c)(2)(i)

Profiling Hazards: §201.4(c)(2)(i)

Assessing Vulnerability by Jurisdiction: §201.4(c)(2)(ii)

Assessing Vulnerability of State Facilities: §201.4(c)(2)(ii)

N	S
	X
	X
	X
	X

Estimating Potential Losses by Jurisdiction: §201.4(c)(2)(iii)

Estimating Potential Losses of State Facilities: §201.4(c)(2)(iii)

	X
	X

Mitigation Strategy

Hazard Mitigation Goals: §201.4(c)(3)(i)

State Capability Assessment: §201.4(c)(3)(ii)

Local Capability Assessment: §201.4(c)(3)(ii)

Mitigation Actions: §201.4(c)(3)(iii)

Funding Sources: §201.4(c)(3)(iv)

N	S
	X
	X
	X
	X
	X

Coordination of Local Mitigation Planning

Local Funding and Technical Assistance: §201.4(c)(4)(i)

Local Plan Integration: §201.4(c)(4)(ii)

Prioritizing Local Assistance: §201.4(c)(4)(iii)

N	S
	X
	X
	X

Plan Maintenance Process

Monitoring, Evaluating, and Updating the Plan: §201.4(c)(5)(i)

Monitoring Progress of Mitigation Activities: §201.4(c)(5)(ii) and (iii)

N	S
	X
	X

STANDARD STATE HAZARD MITIGATION PLAN APPROVAL STATUS

PLAN NOT APPROVED

PLAN APPROVED

X

See Reviewer's Comments

PREREQUISITE

Adoption by the State

Requirement §201.4(c)(6): The plan **must** be formally adopted by the State prior to submittal to [FEMA] for final review and approval.

Requirement §201.4(c)(7): The plan **must** include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). The State will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			NOT MET	MET
A. Has the State formally adopted the new or updated plan?	Preface Section			X
B. Does the plan provide assurances that the State will continue to comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d)?	Adoption in Preface, Laws included in Ch 6 and in Ch 8.			X
SUMMARY SCORE				X

PLANNING PROCESS: §201.4(b): An effective planning process is essential in developing and maintaining a good plan.

Documentation of the Planning Process

Requirement §201.4(c)(1): [The State plan **must** include a] description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the plan provide a narrative description of how the new or updated plan was prepared?	1) p.iii; 2)" p. x-xiv. 3) Chapter 1, p.1-4 to 1-5. 4) Chapter 2, p.2-1			X
B. Does the new or updated plan indicate who was involved in the current planning process?	Title Page, Acknowledgments, Chapter 2			X

C. Does the new or updated plan indicate how other agencies participated in the current planning process?	Title Page, Acknowledgments, Chapter 1 Introduction, 1-5 Chapter 2, p. 2-2 to 2-9			X
D. Does the updated plan document how the planning team reviewed and analyzed each section of the plan?	Acknowledgments, Executive Summary, "2007 Mitigation Plan Update Process" p. x-xiv. Ch 1, Ch 2, p. 2-5 to 2-11 Adoption, adopts by reference			X
E. Does the updated plan indicate for each section whether or not it was revised as part of the update process?	Chapter 1, Appendix A.			X
SUMMARY SCORE				X

Coordination Among Agencies

Requirement §201.4(b): The [State] mitigation planning process **should** include coordination with other State agencies, appropriate Federal agencies, interested groups, and

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe how Federal and State agencies were involved in the current planning process?	Acknowledgments, Executive Summary, Ch 1, Ch 2, Ch 2 appendices, Ch 6	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		X
B. Does the new or updated plan describe how interested groups (e.g., businesses, non-profit organizations, and other interested parties) were involved in the current planning process?	Acknowledgments, Ch 1, Ch 2, Ch 2 appendices, Ch 6	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		X
C. Does the updated plan discuss how coordination among Federal and State agencies changed since approval of the previous plan?	Chapter 2, p. 2-11, and Chapter 8: continue to build on established process and			X

	structure Executive Summary, "2007 Mitigation Plan Update Process" p. x-xiv. (Note: Electronic public review)			
SUMMARY SCORE				X

Program Integration

Requirement §201.4(b): [The State mitigation planning process **should**] be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe how the State mitigation planning process is integrated with other ongoing State planning efforts?	Yes, Chapter 6; Chapter 2, section 2.3, p.2-12 to 2-15	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		X
B. Does the new or updated plan describe how the State mitigation planning process is integrated with FEMA mitigation programs and initiatives?	Executive Summary, p. iii-x. Chapter 1, p. 1-14. Ch. 6 current mitigation, HMGP and PDM, p. 6-66	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		X
SUMMARY SCORE				X

RISK ASSESSMENT: §201.4(c)(2): [The State plan must include a risk assessment] that provides the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments.

Identifying Hazards

Requirement §201.4(c)(2)(i): *[The State risk assessment shall include an] overview of the type ... of all natural hazards that can affect the State*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan provide a description of the type of all natural hazards that can affect the State? If the hazard identification omits (without explanation) any hazards commonly recognized as threats to the State, this part of the plan cannot receive a Satisfactory score.	Chapter 1, Appendix A lists changes. Ch. 3 reviews each hazard impacting Hawaii. Chapter 3 appendix has full studies of two declared disasters.			X
SUMMARY SCORE				X

Profiling Hazards

Requirement §201.4(c)(2)(i): *[The State risk assessment shall include an overview of the] location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the risk assessment identify the location (i.e., geographic area affected) of each natural hazards addressed in the new or updated plan?	Ch 3, every section Chapter 4, State Assets Chapter 5, RVA			X

B. Does the new or updated plan provide information on previous occurrences of each hazard addressed in the plan?	Ch 3, Hazard Identification Chapter 5 Risks and Vulnerability Chapter 6 Current Mitigation Actions to address hazard risks Chapter 7 – recommendations for mitigation by hazard			X
C. Does the new or updated plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the plan?	Ch 3 and Ch 5, section 5.1.			X
SUMMARY SCORE				X

Assessing Vulnerability

Requirement §201.4(c)(2)(ii): [The State risk assessment **shall** include an] overview and analysis of the State's vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments as well as the State risk assessment. The State **shall** describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned critical or operated facilities located in the identified hazard areas shall also be addressed

Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development...

Assessing Vulnerability by Jurisdiction

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe the State's vulnerability based on estimates provided in local risk assessments as well as the State risk assessment?	Chapter 3 and Chapter 5, includes information based on hazard. Table 5-2, p. 5-4.			X

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B. Does the new or updated plan describe the State's vulnerability in terms of the jurisdictions most threatened and most vulnerable to damage and loss associated with hazard event(s)?	Chapters 3 and 5. Section 5.1 describes relative risk to each hazard by County.			X
C. Does the updated plan explain the process used to analyze the information from the local risk assessments, as necessary?	Chapter 5, RVA, p. 5-1			X
D. Does the updated plan reflect changes in development for jurisdictions in hazard prone areas?	Chapter 5.1 updated data Chapters 6, p. 6-40.			X
SUMMARY SCORE				X

Assessing Vulnerability of State Facilities

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe the types of State owned or operated critical facilities located in the identified hazard areas?	Chapter 4 and Chapter 5.			X
SUMMARY SCORE				X

Estimating Potential Losses

Requirement §201.4(c)(2)(iii): [The State risk assessment **shall** include an] overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State **shall** estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development...

Estimating Potential Losses by Jurisdiction

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan present an overview and analysis of the potential losses to the identified vulnerable structures?	Chapters 4 and 5. Chapter 6, p. 6-40.			X
B. Are the potential losses based on estimates provided in local risk assessments as well as the State risk assessment?	Chapter 5, p. 5-1 to 5-27.			X
C. Does the updated plan reflect the effects of changes in development on loss estimates?	Chapter 5, Chapter 6, and proposed policies in Chapter 7.			X
SUMMARY SCORE				X

Estimating Potential Losses of State Facilities

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
Does the new or updated plan present an estimate of the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities in the identified hazard areas?	Chapter 5, p. 5-19 and p. 5-27.			X
SUMMARY SCORE				X

MITIGATION STRATEGY: §201.4(c)(3) [To be effective the plan must include a] Mitigation Strategy that provides the State's blueprint for reducing the losses identified in the risk assessment.

Hazard Mitigation Goals

Requirement §201.4(c)(3)(i): [The State mitigation strategy **shall** include a] description of State goals to guide the selection of activities to mitigate and reduce potential losses.

Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan provide a description of State mitigation goals that guide the selection of mitigation activities? Yes, including review and update of some objectives	Chapter 7, section 7.1, p. 7-3.			X
B. Does the updated plan demonstrate that the goals were assessed and either remain valid or have been revised? Objectives reviewed and added.	Chapter 7, p. 7-3			X
SUMMARY SCORE				X

State Capability Assessment Requirement §201.4(c)(3)(ii): [The State mitigation strategy **shall** include a] discussion of the State's pre-and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas [and] a discussion of State funding capabilities for hazard mitigation projects

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan include an evaluation of the State's pre-disaster hazard management policies, programs, and capabilities?	Chapter 6, Chapter 6 Appendix			X
A. Does the new or updated plan include an evaluation of the State's post-disaster hazard management policies, programs, and capabilities? Where capabilities seem lacking as realized from recent disasters, proposed actions to correct have been included in recommendations.	Chapter 6 and Chapter 7.			X

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B. Does the new or updated plan include an evaluation of the State's policies related to development in hazard prone areas ? Yes, especially as related to coastal development and overall land use.	Chapter 6, p.6-40			X
D. Does the new or updated plan include a discussion of State funding capabilities for hazard mitigation projects?	Chapter 7 and Chapter 8 Appendix A.			X
C. Does the updated plan address any hazard management capabilities of the State that have changed since approval of the previous plan? More knowledge of some disasters, in the process of evaluating how these will be incorporated into policies.	Chapters 6 and 7,			X
SUMMARY SCORE				X

Local Capability Assessment

Requirement §201.4(c)(3)(ii): [The State mitigation strategy **shall** include] a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan present a general description of the local mitigation policies, programs, and capabilities?	Chapter 6, p. 6-75			X
B. Does the new or updated plan provide a general analysis of the effectiveness of local mitigation policies, programs, and capabilities?	Chapter 6, p. 75			X
SUMMARY SCORE				X

Mitigation Actions

Requirement §201.4(c)(3)(iii): [State plans **shall** include an] identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section **should** be linked to local plans, where specific local actions and projects are identified.

Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan identify cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering?	Chapter 7, p. 7-29			X
B. Does the new or updated plan evaluate these actions and activities?	Chapters 6 and 7.			X
C. Does the new or updated plan prioritize these actions and activities?	Chapter 7, p.7-26. Chapter 7, Appendix A.			X
D. Does the new or updated plan explain how each activity contributes to the overall State mitigation strategy?	Chapter 6 and Chapter 7.			X
E. Does the mitigation strategy in the new or updated section reflect actions and projects identified in local plans?	Chapter 7, p. 7-29	Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.		X
SUMMARY SCORE				X

Funding Sources

Requirement §201.4(c)(3)(iv): [The State mitigation strategy **shall** include an] identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan identify current sources of Federal, State, local, or private funding to implement mitigation activities?	Chapter 7 and 8, appendix A			X
B. Does the new or updated plan identify potential sources of Federal, State, local, or private funding to implement mitigation activities?	Chapter 8, Appendix A			X

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C. Does the updated plan identify the sources of mitigation funding used to implement activities in the mitigation strategy since approval of the previous plan? Includes section on PDM and HMGP funding, NRCS, and other funding contributions	Chapters 7 and 8			X
SUMMARY SCORE				X

COORDINATION OF LOCAL MITIGATION PLANNING

Local Funding and Technical Assistance

Requirement §201.4(c)(4)(i): [The section on the Coordination of Local Mitigation Planning **must** include a] description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan provide a description of the State process to support, through funding and technical assistance, the development of local mitigation plans?	Chapter 2, 6, and 7.			X
B. Does the updated plan describe the funding and technical assistance the State has provided in the past three years to assist local jurisdictions in completing approvable mitigation plans?	Executive Summary, Ch. 1, and Chapter 2.			X
SUMMARY SCORE				X

Local Plan Integration

Requirement §201.4(c)(4)(ii): [The section on the Coordination of Local Mitigation Planning **must** include a] description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan provide a description of the process and timeframe the State established to review local plans? Part of	Executive Summary, "Mitigation Planning Process" and "2007 Update" Chapter 1, p. 1-14; Chapter 2 and Chapter 8; chapter 7 section 7.3			X
B. Does the new or updated plan provide a description of the process and timeframe the State established to coordinate and link local plans to the State Mitigation Plan?	Adoption; Chapter 2 and Chapter 8; chapter 7 section 7.3			X
SUMMARY SCORE				X

Prioritizing Local Assistance

Requirement §201.4(c)(4)(iii): *[The section on the Coordination of Local Mitigation Planning **must** include] criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which **should** include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures.*

*Further, that for non-planning grants, a principal criterion for prioritizing grants **shall** be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.*

Requirement §201.4(d): *Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan provide a description of the criteria for prioritizing those communities and local jurisdictions that would receive planning and project grants under available mitigation funding programs?	Chapter 7, section 7.3			X
B. For the new or updated plan, do the prioritization criteria include, for non-planning grants, the consideration of the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated cost?	Chapter 7, section 7.3			X
C. For the new or updated plan, do the criteria include considerations for communities with the highest risk?	Chapter 7, section 7.3	<i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
D. For the new or updated plan, do the criteria include considerations for repetitive loss properties?	Chapter 7, section 7.3	<i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
E. For the new or updated plan, do the criteria include considerations for communities with the most intense development pressures?	Chapter 7, section 7.3	<i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
SUMMARY SCORE				X

PLAN MAINTENANCE PROCESS

Monitoring, Evaluating, and Updating the Plan **Requirement §201.4(c)(5)(i):** *[The Standard State Plan Maintenance Process **must** include an] established method and schedule for monitoring, evaluating, and updating the plan.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe the method and schedule for monitoring the plan? (e.g., identifies the party responsible for monitoring , includes schedule for reports, site visits, phone calls, and/or meetings)	Chapters 2, 7 and 8			X
B. Does the new or updated plan describe the method and schedule for evaluating the plan? (e.g., identifies the party responsible for evaluating the plan, includes the criteria used to evaluate the plan) - State Hazard Mitigation Forum	Chapters 2, 7 and 8			X
C. Does the new or updated plan describe the method and schedule for updating the plan?	Executive Summary, Chapters 2, 7			X
D. Does the updated plan include an analysis of whether the previously approved plan's method and schedule worked, and what elements or processes, if any, were changed?	Chapter 8			X
SUMMARY SCORE				X

Monitoring Progress of Mitigation Activities **Requirement §201.4(c)(5)(ii):** *[The Standard State Plan Maintenance Process **must** include a] system for monitoring implementation of mitigation measures and project closeouts. Requirement §201.4(c)(5)(iii):* *[The Standard State Plan Maintenance Process **must** include a] system for reviewing progress on achieving goals as well as activities and projects in the Mitigation Strategy.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe how mitigation measures and project closeouts will be monitored?	Chapters 2, 6-8			X
B. Does the new or updated plan identify a system for reviewing progress on achieving goals in the Mitigation Strategy?	Chapter 8, p.8-1			X
C. Does the updated plan describe any modifications, if any, to the system identified in the previously approved plan to track the initiation, status, and completion of mitigation activities?	Chapter 8, p. 8-1			X

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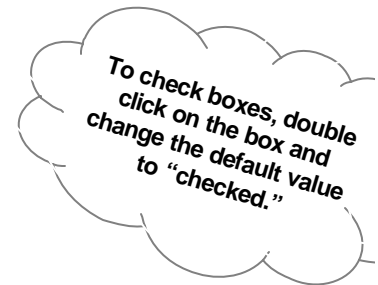
D. Does the new or updated plan identify a system for reviewing progress on implementing activities and projects of the Mitigation Strategy?	Chapter 8, p. 8-7			X
E. Does the updated plan discuss if mitigation actions were implemented as planned? Most significant are implementation of upgraded building codes, training on codes, improved sheltering	Exec Summ, Chapters 6 and 7			X
SUMMARY SCORE				X

Matrix A: Profiling Hazards

This matrix can assist FEMA in scoring each hazard. States may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the State. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.4(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An “N” for any element of any identified hazard will result in a “Needs Improvement” score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.4(c)(2)(i)	A. Location		B. Previous Occurrences		C. Probability of Future Events	
		Yes	N	S	N	S	N
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Legend:**

§201.4(c)(2)(i) Profiling Hazards

- A. Does the risk assessment identify the location (i.e., geographic area affected) of each natural hazard addressed in the **new or updated** plan?
- B. Does the plan provide information on previous occurrences of each hazard addressed in the **new or updated** plan?
- C. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the **new or updated** plan?

Matrix B: Assessing Vulnerability

This matrix can assist FEMA in scoring each hazard. States may find the matrix useful to ensure that their plan addresses each requirement. Note that this matrix only includes items for Requirements §201.4(c)(2)(ii) and §201.4(c)(2)(iii) that are related to specific natural hazards that can affect the State. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.4(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An “N” for any element of any identified hazard will result in a “Needs Improvement” score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.4(c)(2)(i)	1. Vulnerability by Jurisdiction				2. Vulnerability to State Facilities				3. Loss Estimate by Jurisdiction				4. Loss Estimate of State Facilities			
	Yes	N	S	N	S	N	S	N	S	N	S	N	S				
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Coastal Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

To check boxes, double click on the box and change the default value to “checked.”

Legend

§201.4(c)(2)(ii) Assessing Vulnerability by Jurisdiction (see element B)

1. Does the **new or updated** plan describe the State's vulnerability in terms of the jurisdictions most threatened and most vulnerable to damage and loss associated with hazard event(s)?

§201.4(c)(2)(ii) Assessing Vulnerability to State Facilities (see element A)

2. Does the **new or updated** plan describe the types of State owned or operated critical facilities located in the identified hazard areas?

§201.4(c)(2)(iii) Estimating Potential Losses by Jurisdiction (see element A)

3. Does the **new or updated** plan present an overview and analysis of the potential losses to the identified vulnerable structures?

§201.4(c)(2)(iii) Estimating Potential Losses of State Facilities (see element A)

4. Does the **new or updated** plan present an estimate of the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities in the identified hazard areas?